

WHAT IS CLAIMED IS:

1 1. A system for real-time device driver error handling, comprising:
2 a computer comprising a device driver, a monitoring unit and a device driver information,
3 said monitoring unit monitoring an operating state and searching said device driver information, and
4 outputting said diagnosing message to said computer when said device driver errors occur; and
5 a web server comprising a driver error handling program, said device driver error handling
6 program storing a standard driver information, performing a diagnosis of said device driver by
7 comparing said standard driver information with said device driver information, and displaying said
8 diagnosing result on said computer.

1 2. The system of claim 1, with said web server further comprising:
2 a first portion storing said standard driver information;
3 a second portion interpreting said device driver information searched by said monitoring unit;
4 a third portion performing a diagnosis of said device driver by comparing said standard driver
5 information from said first portion with said device driver information from said second portion; and
6 a fourth portion displaying the diagnosing result from said third portion to said computer.

1 3. The system of claim 2, with said fourth portion displaying the error correction result
2 to said computer after automatically correcting the error by said standard diagnosis information
3 stored in said first portion in case of an automatically correctable error, said fourth portion displaying
4 how to correct the error to said computer in case of automatically uncorrectable error when the
5 device driver error occurs.

1 4. The system of claim 1, with said monitoring unit being a file of said computer, said
2 file being a logical block of computer information as designated by a name and treated as a unit.

1 5. The system of claim 4, with said file not being able to be manipulated by a user of
2 said computer.

1 6. The system of claim 2, with said standard driver information being changeable by an
2 operator of said web server.

1 7. The system of claim 3, with the automatically uncorrectable error being a hardware
2 error of said computer or a device corresponding to said device driver.

1 8. A method of real-time device driver error handling, comprising:
2 installing a monitoring unit in order to monitor a state of a computer and an operating state
3 of a device driver in said computer;
4 storing a standard diagnosis information of said device driver in order to perform a diagnosis
5 of said device driver;
6 monitoring an operating state of said device driver to detect device driver errors through said
7 monitoring unit;
8 contacting said computer with a web server to execute a driver error handling program
9 through a network, said driver error handling program performing a diagnosis of said device driver;
10 confirming the device driver errors by comparing standard driver information with said
11 device driver information of said device driver; and
12 displaying a diagnosing result to said computer from said step of confirming the device driver
13 errors.

1 9. The method of claim 8, further comprising,
2 discriminating whether the device driver error is an automatically correctable error or an

3 automatically uncorrectable error;

4 correcting the device driver error when said computer accepts a correction message in case
5 of the automatically correctable error, thereafter displaying an error correction result; and

6 displaying how to correct the device driver errors in case of the automatically uncorrectable
7 error.

1 10. The method of claim 8, further comprising
2 outputting a message of an automatic correction advice to said computer when said computer
3 does not accept said correction message in case of the automatically correctable error.

1 11. The method of claim 8, with said step of installing said monitoring unit being to
2 simultaneously install said monitoring unit for said device driver when said device driver is installed
3 in said computer.

1 12. The method of claim 8, with said web server further comprising:
2 a first portion storing said standard diagnosis information of said device driver;
3 a second portion interpreting said device driver information searched by said monitoring unit;
4 a third portion performing a diagnosis of said device driver by comparing said standard
5 diagnosis information with said device driver information; and
6 a fourth portion displaying the diagnosing result to said computer.

1 13. The method of claim 8, with said monitoring unit being a file of said computer, said
2 file being a logical block of computer information as designated by a name and treated as a unit.

1 14. The method of claim 13, with said file not being able to be manipulated by a user of
2 said computer.

1 15. The method of claim 8, with said standard diagnosis information being changeable
2 by an operator of said web server.

1 16. The method of claim 9, with the automatically uncorrectable error being a hardware
2 error of said computer or a device corresponding to said device driver.

1 17. A method, comprising the steps of:
2 monitoring an operational state of a device driver installed on a first computer;
3 storing standard diagnosis information of said device driver on a second computer, said
4 standard diagnosis information being when an operational state of said device driver is normal;
5 networking said first computer with said second computer;
6 outputting said monitored device driver information from said monitoring of the operational
7 state of said device driver;
8 sending said monitored device driver information from said first computer to said second
9 computer;
10 comparing said standard diagnosis information with said monitored device driver information
11 to confirm any error with said device driver;
12 displaying instruction for correcting the error of said device driver when the error is not
13 automatically correctable; and
14 correcting the error of said device driver when the error is automatically correctable.

1 18. The method of claim 17, further comprising the steps of:
2 instructing by said first computer to said second computer to execute a program after said
3 step of networking said first computer with said second computer, said program handling the device
4 driver error on said first computer;

5 searching for a monitoring file on said first computer by said program;
6 executing said monitoring file through instructions of said program; and
7 searching for said monitored device driver information by said monitoring file for said step
8 of outputting said monitored device driver information.

1 19. The method of claim 18, further comprising the step of interpreting the monitored
2 device driver information before said step of comparing said standard diagnosis information with
3 said monitored device driver information.

1 20. The method of claim 19, further comprising the steps of:
2 displaying on said first computer a result of said step of comparing said standard diagnosis
3 information with said monitored device driver information to confirm any error with said device
4 driver;
5 discriminating whether the error is automatically correctable;
6 prompting a response from said first computer as to whether a correction is to be
7 automatically executed when the error is automatically correctable; and
8 displaying on said first computer a result of the error correction after said step of
9 automatically correcting the error.

1 21. The method of claim 20, with said second computer being a web server displaying
2 a web page on said first computer for instruction by said first computer.

1 22. The method of claim 20, with the automatically correctable error being a software
2 related error on said first computer and the automatically uncorrectable error being a hardware
3 related error on said first computer.

23. The method of claim 20, further comprising the steps of:

recommending a correction of the error when the error is automatically correctable and when said first computer opted no correction in said step of prompting a response from said first computer;

executing no correction of the error when the recommendation is not accepted; and

correcting the error when the recommendation is accepted.